No.



200500327

THE UNITED SHATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Aorth Carolina Agricultural Research Serbice

There has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

MOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY THAT'S FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE MICHIT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR OR TING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE WE PURPOSE. OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE SE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT OF BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY IN ESOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321

OAT

'SS 76-40'

In Costimon Microst, I have hereunto set my hand and caused the seal of the Hant Haristy Arotection Office to be affixed at the City of Washington, D.C. this seventh day of August, in the year two thousand and six.

amissioner Secretary of B

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties

SIGNATURE OF OWNER	Pessoli	SIGNATURE OF OWNER		
NAME (Please print or type) J. PAUL MORPI	12.	NAME (Please print or type)		
CAPACITY OR TITLE	DATE	CAPACITY OR TITLE	DATE	· · · · · · · · · · · · · · · · · · ·
PROF. CROP Scie	wa MAY 3 200	5		

(See reverse for instructions and information collection burden state

IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED

REFERENCE NUMBER. (Please use space indicated on reverse.)

200500327.

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filling fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvpindex.htm

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 http://www.ams.usda.gov/lsg/seed.htm.

ITEM

19a. Give:

- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 20. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)
- 24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

Exhibit A. Origin and Breeding History SS 76-40 Oat

Pedigree:

SS 76-40, formally designated NC97-8885, was selected from a broad based population containing approximately 75% winter and 25% spring oat germplasm. Two spring oat lines, J755-1 and J773-1 with high groat protein percentage, were obtained from Dr. K. J. Frey, Iowa State University. These spring oats were advanced cycle lines from a recurrent selection program to increase groat protein percentage (Moser and Frey, Euphytica 78:123-132, 1994). To develop the broad based population, both spring lines were crossed to, and the resulting F₁ hybrids backcrossed to the winter oat breeding lines 'NC85-153', 'NC81-263p', 'NC88-1756' or the cultivar 'Brooks'. BC₁F₂ seed from the crosses were bulked together prior to generation advance.

Brooks (Clav 9260) (PVP Number 7900090) is a winter oat cultivar released by the N.C. Agricultural Research Service in 1978 (Murphy. Crop Sci 19:295, 1979). The pedigree of Brooks is Carolee / Fulgrain /6/ Fulgrain /5/ CI 5106 // Hajira / Joanette /4/ Atlantic / Clinton / Santa Fe /3/ CI 2455. Besides excellent yield and test weight, Brooks had high groat protein content.

NC88-1756 is a winter oat breeding line with the pedigree Coker 80-33 / NC81-376. It is a sib of the cultivar 'Rodgers' (PI 593020) (Murphy et al. Crop Sci. 37:1017 1997). It exhibited high yield and test weight, but was never released as a variety.

NC85-153 and NC81-263p were winter oat breeding lines of unknown pedigrees. Netvertheless the 'p' designation in NC81-263p indicates that it had high groat protein. Neither was released as a variety.

Selection and Multiplication:

SS 76-40 was developed using a combination of the mass selection and pedigree breeding methods. The bulk of BC_1F_2 seed were planted in a single 11.1 m² plot at the Central Crops Research Station, Clayton, North Carolina in fall 1993. The plot contained approximately 1700 seeds. In June 1994, 75 panicles were selected from the population based on desired plant height, large panicle size, and a white or yellow color. Selected panicles were threshed separately and $F_{2:3}$ panicle-rows were planted at Clayton in the 1994-95 season. Selection in head-rows was based on winter survival, time of head emergence, plant height, straw strength and overall plant vigor. This protocol was repeated during the 1995-96 season on $F_{3:4}$ panicle-rows and during the 1996-97 season on $F_{4:5}$ panicle rows. A single $F_{4:5}$ panicle-row, designated NC97-8885, was harvested.

Observed Characters:

SS 76-40 was evaluated in a non-replicated observation nursery in the 1997-98 season and replicated multilocation trials during the 1998-99 through 2003-04 seasons. Seven location-years of data from the North Carolina Official Oat Variety Test grown in the 2001-02, 2002-03, and 2003-04 seasons indicated SS 76-40 had a significantly greater test weight than Brooks (Table 1). SS 76-40, Rodgers and Brooks had similar grain

yields and heading dates. SS 76-40 had significantly shorter plant height than Brooks and significantly less lodging than either Brooks or Rodgers. Six location-years of data from the small grains breeding program collected over five seasons indicated that SS 76-40, Rodgers and Brooks had similar grain yields (Table 2). SS 76-40 had a superior test weight, less lodging, more tolerance to freezing temperatures and BYDV in comparisons with Brooks. SS 76-40 was superior to Rodgers for groat protein content. SS 76-40 was entered in the USDA-ARS coordinated Uniform Winter Oat Yield Nursery during the 2000-01 and 2001-02 seasons. Based on data from 11 locations collected in nine states in 2000-01, SS 76-40 was the fourth highest yielding entry overall and displayed good test weight and lodging scores (Table 3). Based on data from 12 locations in 2001-02, SS 76-40 was the sixth highest yielding entry overall (Table 4). It was susceptible to crown rust (caused by Puccinia coronata Cda. f. sp. avenae Eriksson) in the Gulf Coast states. Two-year means (2002-03 and 2003-04 seasons) from Midville (Table 5) and Griffin (Table 6), GA indicated that SS 76-40 did not differ significantly in yield from the highest yielding cultivar in the Georgia official state evaluations. SS 76-40 was entered in the USDA-ARS coordinated Uniform Oat Winterhardiness Nursery during the 2000-01 and 2001-02 seasons. Based on data from 10 locations in 2000-01 (Table 7), and 12 locations in 2001-02, (Table 8), SS 76-40 had a similar winter survival rating as the winter hardy check entries 'Norline' and 'Wintok'.

Multiplication, Purification and Variants:

Thirty-six $F_{8:9}$ panicle selections were grown during the 2000-01 season and a single uniform panicle-row that was true-to-type was harvested to produce breeder seed. This material underwent seed increase during the 2001-02 and 2002-03 seasons. Approximately 55 lbs of $F_{8:11}$ seed was planted in fall 2003. Following harvest and seed conditioning in summer 2004, a total of 2,994 lbs of $F_{8:12}$ seed was transferred to the North Carolina Foundation Seed Producers Inc. Although SS 76-40 has remained uniform and stable in composition since 2001, the Breeders seed increase fields in 2002 and 2003 contained up to 0.25% plants 10-15cm taller than SS 76-40 and up to 0.1% plants with awned spiklets.

 $20\,05\,0\,0\,3\,2\,7$ Table 1. Performance of SS 76-40 and Check Cultivars in the NC Official Variety Testing Program in the 2002, 2003, 2004 Seasons

	Grain Yield bu/ac	Test Weight Ib/bu	Heading Date April	Plant Height in	Lodging %
No. Locations	(7)	(7)	(3)	(4)	(4)
SS 76-40	136.4	35.7	22	38.8	36
Rodgers	134.6	35.6	21	42.5	58
Brooks	124.6	34.0	21	41.0	66
LSD (0.05)	ns	1.4	ns	3.4	20.4
CV %	7.9	3.3	3.3	4.6	21.5

Data collected in Rowan, Lenoir Washington and Bertie counties North Carolina.

Table 2. Mean Performance of SS 76-40 and Check Cultivars in Small Grains Breeding Program Evaluations during Five Seasons (1999 - 2003)

	Grain	Test	Heading	Plant		Freeze		Groat
	Yield	Weight	Date	Height	Lodging	Damage	BYDV	Protein
	bu/ac	nq/q	April	.	%	· %	(0-0)	%
No. Locations	(9)	(9)	(5)	(5)	(5)	(3)	(3)	(4)
SS 76-40	143.0	35.3	20	40.4	23	23.3	2.3	19.1
Rodgers	140.8	34.0	20	44.0	47	35.0	3,5	17.0
Brooks	143.8	33.9	20	43.1	29	45.0	4.5	18.0
(50.05)	Su	1,4	ns	ns	33	13.9	1.3	1.9
% \2	11.9	4.6	1.3	3.0	13,5	23.5	28.9	4.6

Data collected in Rowan County in 1999 and 2001 and Lenoir County in 2000, 2001, 2002 and 2003.

Table 3. Averages Over All Stations for Indicated Characters (Unif. 0at Nur. 2000-1)

ENT	SELECTION	Yield	Yield	Test Wt.	Head Date	Height	Lodging	Crown Rust Winter Kill	Winter Kill
S.	OR VARIETY	Rank	(bu/A)	(nq/qI)	(Julian)	(inches)	(0-0)	(%)	(%)
~	Brooks(ck)	15	93.1	30.5	109	41.8	4.3	29.3	44.2
2	Florida_501(ck)	18	. 88.2	33.4	105	38.3	6.1	0.5	65.8
က	Harrison(ck)	2	109.8	34.4	110	42.1	2.0	1.3	14.1
4	Rodgers(ck)	æ	101.0	31.2	110	42.4	2.5	2.5	19.1
Ω.	TAMO 397(ck)	11	96.4	32.2	107	40.8	1.3	0.0	28.4
ග	FLX474-1-B2-8-W1	6	99.5	36.4	106	39.0	3.6	0.0	11.6
7	NC97-8349	ъ	101.9	30.1	110	37.5	3.1	22.8	45.0
8	NC97-8885	4	102.9	32.6	111	39.5	2.0	2.8	15.9
6	NC97-8972N	19	72.4	39.7	109	38.7	3.2	36.0	45.8
19	TX96D070	13	95.4	29.2	102	29.5	1.8	2.0	30.0
	TX98D666	12	92.6	34.9	106	40.3	5.5	0.0	27.5
12	TX96D093	د	103.4	32.9	113	38.7	3.4	8.0	20.0
13	SC910337	16	92.1	35.9	111	39.1	4.4	0.0	24.1
7	SC961246	Ψ-	110.6	31.8	111	35.5	1.6	2.5	40.0
15	SC941348	7	101.6	33.2	108	41.2	3.0	3.5	16.6
16	LA 9339E45	9	101.8	33.2	113	41.0	3.1	0.0	25.9
17	LA924E219-1	14	93.4	32.1	110	37.5	2.6	0.0	10.9
18	LA9310E159-2	10	97.2	33,6	110	41.6	3.7	0.0	42.5
13	LA90151C121-3-1-3-2-1	17	91.8	31.9	112	35.5	1.9	1.0	18.4
	Average		97.3	33.1	109	39.0	3.1	ري دي.	28.7
	LSD(0.05)	-	12.4	1.5	#SU	7	1.8	"su	"su
	%AO		15.2	5.2	8.4	6.3	55.8	233.5	54.8
	No. Locations		7	11	6	10	7	2	2

Table 4. Averages Over All Stations for Indicated Characters (Unif. 0at Nur. 2001-02)

OR VARIETY Rank (pul)	ENT	SEI ECTION	Yield	Vield	Tact Wf	Hoad Date	Loight				
Particolocky Control	S	٠	Juco	(Pri/0)	(15/15.1)	Lican Date	ileigiit Geetee		Crown Rust		Freeze Damage
Partirson(ck)		ſ	Nalih	(M/na)	(na/ai)	(Julian)	(inches)	(6-0)	(%)	(6-0)	(0-0)
Reggers(ck) 17 81.1 30.1 104 41.8 4.9 72.5 4.0 FLX774-H2B-WH 13 79.6 33.2 104 41.8 3.2 0.0 3.7 FLY774-H2B-WH 13 79.6 33.2 104 41.8 3.2 0.0 3.7 FL9708-P37 24 74.9 32.0 104 37.2 3.4 0.0 4.0 FL9704-P45 16 78.8 31.3 103 40.5 5.0 3.5 4.7 FL9704-P45 16 78.8 31.3 103 38.2 4.2 8.0 4.7 FL9704-P45 16 78.8 31.3 103 38.2 4.5 8.0 4.7 FL9704-P45 16 78.9 31.3 104 48.8 5.0 4.7 FL9704-P45 16 38.2 24 105 38.3 3.4 4.7 FL9704-P45 18 31.3 105 40.0	 1	Harrison(ck)	~	88.6	31.9	103	43.2	4.5	53.5	4.0	2.4
TAMO 397(ck) 27 71.6 28.7 104 41.9 3.2 0.0 3.7 FLX474-H2R-8-W1 1 75.6 33.2 102 37.7 3.4 0.0 4.0 FLY008-P36 2.4 75.6 32.0 104 37.7 3.4 0.0 4.0 FL9708-P36 2.4 75.6 32.9 103 36.5 4.7 4.0	~	Rodgers(ck)	12	81.1	30.1	104	41.8	4.9	72.5	4.0	4.5
FLXA7A1-B28-W1 13 79.6 33.2 102 37.7 4.6 2.6 5.0 FL970a-P37 1 9.7 3.2 104 37.2 3.4 0.0 4.0 FL970a-P28 24 7.4 9.2 103 40.5 5.0 3.5 4.7 FL970a-P44 16 7.8 3.1 103 40.5 5.0 4.7 FL970a-P44 16 7.8 3.1 103 40.5 5.0 4.7 FL970a-P28 2 7.1 29.4 108 25.5 4.5 8.0 4.7 NC97-8865 8 3.0 104 38.3 3.4 5.0 4.7 NC97-8865 8 3.0 104 38.3 3.4 4.7 4.7 NC97-8865 8 3.0 104 38.3 3.4 4.7 4.7 NC97-8866 9 84.0 3.2 102 4.0 4.4 8.0 4.7	က	TAMO 397(ck)	27	71.6	29.7	104	41.9	3.2	0.0	3.7	5.0
FL9708-537 FL9708-537 FL9708-537 FL9708-538 FL9704-258 FL9904-258	4.	FLX474-1-B2-8-W1	3	9.62	33.2	102	37.7	4.6	2.5	5.0	4.8
FL9708-P58 24 74.9 32.0 104 37.1 3.9 1.5 4.3 FL9704-P55 22 75.6 32.9 103 40.5 5.0 35.5 4.7 FL9704-P44 44 16 78.8 31.3 103 40.5 5.0 35.5 4.7 FL8712-H83 28 70.0 29.4 105 39.0 2.9 2.5 5.3 NC97-4895 5 73.2 30.1 104 38.3 3.4 48.5 3.7 NC97-4895 5 73.2 30.1 104 38.3 3.4 4.7 NC97-4872N 5 84.0 37.2 102 4.4 4.8 0.0 4.7 NC97-4872N 3 43.2 102 4.1 4.8 0.0 4.7 NC907-4872N 3 43.2 28.4 102 4.1 4.8 0.0 4.7 TX980593 3 91.3 10.2 4.1	5	FL9708-P37	-	97.2	32.7	104	37.2	3.4	0.0	4.0	4.5
FL9704-P25 FL9704-P25 FL9704-P24 FL5704-P24 FL5704-P34 FL5204R26,782-w1-G2 Ze 71,0 29,4 105 39,0 2,9 2,5 5,3 NC97-8872N Ze 89,8 30,1 104 38,3 3,4 69,5 3,7 TX98D666 TX98D666 TX98D666 TX98D666 TX98D666 TX98D666 TX98D666 TX98D76 Ze 71,1 29,4 105 39,0 2,9 2,5 5,3 TX00D33 Ze 71,2 29,4 105 38,7 4,4 93,0 5,0 TX98D7803 Ze 81,3 31,8 104 38,2 2,8 18,5 4,7 TX98D033 TX00D34 TX98D7805 Ze 71,1 29,3 105 30,6 2,9 10,5 4,0 TX98D7805 Ze 71,1 29,3 105 30,6 2,9 10,5 4,0 TX98D866 Ze 71,1 31,3 103 39,6 3,6 1,0 Ze 71,1 29,3 10,5 3,6 3,4 7,1,5 3,0 Ze 71,1 29,3 10,5 3,1 3,1 3,1 3,1 3,1 3,1 3,1 3,1 3,1 3,1	0	FL9708-P58	24	74.9	32.0	104	37.1	3.9	1.5	4.3	3.6
FL9704-P44 FL9704-P44 FL9704-P44 FLS712-H83 FL920HR26/782-w1-G2 Ze 71.9 29.4 106 39.0 2.9 2.5 5.3 \text{NC97-8982} \text{NC97-8982} \text{NC97-8982} \text{L2920HR26/782-w1-G2} \text{Ze} \text{Septence} \te	_	FL9704-P25	. 52	75.6	32.9	103	40.5	5.0	35.5	4.7	3.5
FLX512-1-B3 FLX512-B3 FLX512-1-B3 FLX512-B3	∞	FL.9704-P44	16	78.8	31.3	103	39.2	4.2	32.0	4.7	2.9
FL920HR26,782-w1-G2 26 71.9 29.4 105 39.0 2.9 2.5 5.3 NC97-895Z 6 89.8 30.1 104 38.3 3.4 56.5 3.7 NC97-897ZN 30 63.1 37.0 105 38.7 4.4 95.0 5.0 TX000176 25 73.2 30.6 102 4.0 4.6 0.0 4.7 TX98D666 3 84.0 33.2 102 4.0 4.6 0.0 4.7 TX98D663 3 91.3 91.3 102 4.0 4.6 0.0 4.7 TX98D666 3 84.0 33.2 102 4.0 4.6 0.0 4.7 TX00324 18 77.6 31.3 104 38.2 2.8 105 4.0 4.0 4.7 SC941348 11 81.4 30.4 105 36.6 2.9 10.5 3.7 LA9853D36-6 14	თ	FLX512-1-B3	28	0.07	28.4	108	25.5	4.5	8.0	4.7	4.3
NC97-8885 6 89.8 30.1 104 38.3 3.4 59.5 3.7 NO97-8972N 30 53.1 37.0 105 38.7 4.4 89.0 5.0 TX00D176 25 73.2 30.6 102 41.4 4.8 0.0 4.7 TX98D66 3 44.0 33.2 102 40.0 4.6 0.0 4.7 TX9BD66 3 91.3 31.8 104 38.2 2.8 18.5 4.3 TX9D0324 19 77.6 31.3 108 36.6 2.9 10.5 4.7 TAMO"Shorty" 18 78.0 25.1 106 30.5 2.0 0.0 6.0 SC941346 2 2.9 10.2 30.4 71.5 3.7 LA9553D36-6 14 79.1 31.3 106 35.6 2.9 10.0 4.7 SC941348 14 70.1 31.3 106 35.6	10	FL920HR26,782-w1-G2	56	71.9	29.4	105	39.0	2.9	2.5	5.3	4.9
NC97-8972N 30 63.1 37.0 105 38.7 44 93.0 5.0 TX90D076 25 73.2 30.6 102 41.4 4.8 0.0 4.7 TX98D66 9 84.0 33.2 102 40.0 4.6 0.0 4.7 TX96D034 19 77.6 31.3 108 36.2 2.8 18.5 4.3 TX00D324 18 77.6 31.3 108 36.5 2.9 10.5 4.7 TAMO"Shorty" 18 78.0 25.1 106 30.5 2.0 0.0 6.0 BAB2923*TAMO2002** 21 76.8 31.3 103 36.5 3.4 4.1 4.0 4.7 BAB2923*TAMO2002** 21 76.8 31.3 107 36.5 3.4 4.1 4.7 4.0 4.7 4.0 4.0 4.7 4.0 4.0 4.7 4.0 4.0 4.7 4.0 4.1 4.		NC97-8885	မ	89.8	30.1	104	38.3	3.4	59.5	3.7	4.5
TX00D176 26 73.2 30.6 102 41.4 4.8 0.0 4.7 TX98D666 9 84.0 33.2 102 40.0 4.6 0.0 4.7 TX98D666 9 84.0 33.2 102 40.0 4.6 0.0 4.7 TX96D093 3 91.3 31.8 104 38.2 2.9 18.5 4.3 TX96D034 18 77.6 31.3 108 30.6 2.9 10.0 4.7 BAB2323"TAMO2002" 21 76.8 31.3 106 36.6 2.9 10.0 6.0 SC941348 11 81.4 30.4 103 36.6 2.3 4.7 4.7 SC941348 11 81.4 30.4 103 40.8 4.4 73.5 3.7 LA9533D36-6 14 79.1 31.3 107 39.2 2.3 0.0 3.7 LA9533D36-5 16 30.1 31.2	12	NC97-8972N	30	53.1	37.0	105	38.7	4.4	93.0	5.0	5.0
TX98D666 9 84.0 33.2 102 40.0 4.6 0.0 4.7 TX80D033 3 91.3 31.8 104 38.2 2.8 18.5 4.3 TX00D324 19 77.6 31.3 108 36.6 2.9 10.5 4.0 TAMO"Shorty" 18 78.0 25.1 106 36.6 2.9 10.5 4.0 BAB2323"TAMO2002" 21 76.0 25.1 106 36.6 3.4 47.0 47 47.0 47 47.0 47 47.0 47 47.0 47 47.0 47 47.0 47 47.0 47 47.0 47 47.0 47 47.0 47 47.0 47 47.0 47 47.0 47 47.0 47 47.0 47 47.0 47 47.0 47 47 47.0 47 47.0 47 47.0 47 47.0 47 47.0 47.0 47	.	TX00D176	52	73.2	30.6	102	41.4	4.8	0.0	4.7	3.8
TX96D093 3 91.3 31.8 104 38.2 2.8 18.5 4.3 TX00D324 19 77.6 31.3 108 36.6 2.9 10.5 40 TAMO*Shorty** 18 78.0 25.1 106 30.5 2.0 0.0 60 BAB2923*TAMO2002** 21 76.8 31.3 103 39.6 3.6 14.0 47 SC961246 2 93.8 29.3 105 35.6 3.4 71.5 30 SC961248 11 81.4 30.4 107 36.6 3.4 71.5 30 SC961248 11 81.4 30.4 107 36.6 3.3 0.0 47 SC961248 11 81.4 30.4 107 36.6 3.2 0.0 3.7 LA9533D36-6 14 79.1 31.2 106 42.7 36 0.0 3.3 LA966BIB77 2 30.1 31.4<	14	TX98D666	თ	84.0	33.2	102	40.0	4.6	0.0	4.7	3.8
TX00D324 19 77.6 31.3 108 36.6 2.9 10.5 4.0 TAMO"shorty" 18 78.0 25.1 106 30.5 2.0 0.0 6.0 BAB2223*TAMO2002" 21 76.8 31.3 105 35.6 3.4 71.5 3.0 SC961246 2 93.8 29.3 105 35.6 3.4 71.5 3.0 SC941348 11 81.4 30.4 105 35.6 3.4 71.5 3.0 LA9535D36-6 14 79.1 31.3 107 39.2 2.3 0.0 3.7 LA9535D36-5 14 79.1 31.5 106 42.7 3.6 0.0 3.7 LA965BIB-77 15 90.1 30.9 105 42.7 3.6 0.0 4.7 AR0289-9 15 75.1 12.1 29.3 105 38.3 3.0 0.0 4.7 AR0289-7 4	15	TX96D093	က	91.3	31.8	104	38.2	2.8	18.5	4.3	3.4
TAMO"Shorty" 18 78.0 25.1 106 30.5 2.0 0.0 6.0 BAB2223"TAMO2002" 21 76.8 31.3 103 39.6 3.6 14.0 4.7 SC961246 2 93.8 29.3 105 35.6 3.4 71.5 3.0 SC961348 11 81.4 30.4 103 40.8 4.4 73.5 3.7 LA9535D318-4 8 86.6 31.5 106 4.4 73.5 3.7 LA966BIB-161-1 8 86.6 31.5 106 42.7 3.6 0.0 4.7 LA966BIB-77 15 79.1 31.2 106 38.5 2.4 0.0 4.7 AR028-9 15 79.1 10.6 38.3 3.0 0.0 4.7 AR028-4 17 78.5 32.9 107 36.6 2.4 50.0 4.3 AR0258-7 10 83.2 10 32.9	16	TX00D324	19	77.6	31.3	108	36.6	2.9	10.5	4.0	3.6
BAB2923"TAMO2002" 21 76.8 31.3 103 39.6 3.6 14.0 4.7 SC961246 2 93.8 29.3 105 35.6 3.4 71.5 3.0 SC941348 11 81.4 30.4 105 3.6 3.4 71.5 3.0 LA953D36-6 14 79.1 31.3 107 39.2 2.3 0.0 3.7 LA953D36-6 14 79.1 31.5 106 42.7 3.6 0.0 3.7 LA953D36-5 15 90.1 30.9 105 42.7 3.6 0.0 4.7 LA96BB177 2 90.1 30.9 106 38.5 2.4 0.0 4.7 AR0289-9 2 77.6 31.4 94 43.1 4.6 63.0 4.3 AR0289-9 2 77.6 31.4 94 43.1 4.6 63.0 4.7 AR0258-7 4 90.4 32.9 <td>17</td> <td>TAMO"Shorty"</td> <td>28</td> <td>78.0</td> <td>25.1</td> <td>106</td> <td>30.5</td> <td>2.0</td> <td>0.0</td> <td>6.0</td> <td>3.1</td>	17	TAMO"Shorty"	28	78.0	25.1	106	30.5	2.0	0.0	6.0	3.1
SC961246 2 93.8 29.3 105 35.6 3.4 71.5 3.0 SC941348 11 81.4 30.4 103 40.8 4.4 73.5 3.7 LA9533D36-6 14 79.1 31.3 107 39.2 2.3 0.0 3.7 LA953D118-4 8 86.6 31.5 106 42.7 3.6 0.0 3.7 LA956BIB-15-1-1 5 90.1 30.9 105 41.2 2.2 0.0 4.7 LA966BIB-77 15 79.1 31.2 106 38.5 2.4 0.0 3.3 LA966BIB-77 23 75.1 29.3 105 38.3 3.0 0.0 4.7 AR0289-9 20 77.6 31.4 94 43.1 4.6 63.0 4.3 AR0289-9 20 77.6 31.4 94 43.1 4.6 63.0 4.7 AR0258-4 10 83.2 29	138	BAB2923"TAMO2002"	21	76.8	31.3	103	39.6	3.6	14.0	4.7	4.5
SC941348 11 81.4 30.4 103 40.8 4.4 73.5 3.7 LA9533D36-6 14 79.1 31.3 107 39.2 2.3 0.0 3.7 LA953D18-4 8 86.6 31.5 106 42.7 3.6 0.0 4.7 LA966BIB-151-1 5 90.1 30.9 105 41.2 2.2 0.0 4.7 LA966BIB-75-1 15 79.1 31.2 106 38.5 2.4 0.0 3.3 LA966BIB-77 23 75.1 29.3 105 38.3 3.0 0.0 4.7 AR0289-9 20 77.6 31.4 94 43.1 4.6 63.0 4.3 AR0289-9 17 78.5 32.9 107 36.6 2.4 63.0 4.3 AR0258-4 1 78.5 32.9 107 36.6 2.4 63.0 4.0 AR0258-7 4 90.4 32	19	SC961246	7	93.8	29.3	105	35.6	3.4	71,5	3.0	2.8
LA9533D36-6 14 79.1 31.3 107 39.2 2.3 0.0 3.7 LA9535D118-4 8 86.6 31.5 106 42.7 3.6 0.0 3.3 LA966BIB-151-1 5 90.1 30.9 105 41.2 2.2 0.0 4.7 LA966BIB-77 23 75.1 29.3 106 38.5 2.4 0.0 4.7 AR0289-9 20 77.6 31.4 94 43.1 4.6 63.0 4.3 AR0289-9 17 78.5 32.9 107 36.6 2.4 52.0 4.7 AR0258-4 17 78.5 32.9 107 36.6 2.4 52.0 4.7 AR0258-7 4 90.4 32.0 107 35.1 33.5 48.0 40.0 AR0258-7 4 90.4 32.0 104 34.0 38.3 36. 28.4 40.0 AR0258-3 2 64	20	SC941348	Ŧ	81.4	30.4	103	40.8	4.4	73.5	3.7	3.6
LA9535D118-4 8 86.6 31.5 106 42.7 3.6 0.0 3.3 LA966BIB-151-1 5 90.1 30.9 105 41.2 2.2 0.0 4.7 LA965BIB-7 15 79.1 31.2 106 38.5 2.4 0.0 4.7 AR0289-9 20 77.6 31.4 94 43.1 4.6 63.0 4.7 AR0289-9 20 77.6 31.4 94 43.1 4.6 63.0 4.7 AR0289-9 17 78.5 32.9 107 36.6 2.4 63.0 4.7 AR0289-9 17 78.5 32.9 107 36.1 33 48.0 4.7 AR0258-4 10 36.6 2.4 36.6 2.4 52.0 4.7 AR0258-7 4 90.4 32.0 104 36.0 3.8 48.0 4.0 AR0269-3 2 64.6 30.6 107	7	LA9533D36-6	14	79.1	31,3	107	39.2	2.3	0.0	3.7	5.3
LA966BIB-151-1 5 90.1 30.9 105 41.2 2.2 0.0 4.7 LA9533D36-5 15 79.1 31.2 106 38.5 2.4 0.0 3.3 LA966BIB77 23 75.1 29.3 105 38.3 3.0 0.0 4.7 AR0289-9 20 77.6 31.4 94 43.1 4.6 63.0 4.7 AR0289-9 17 78.5 32.9 107 36.6 2.4 63.0 4.7 AR0288-4 17 78.5 32.9 107 36.6 2.4 52.0 4.7 AR0213-12 4 90.4 32.0 104 34.0 3.8 48.0 4.0 AR0258-7 4 90.4 32.0 107 37.1 3.6 88.0 5.0 AR0258-7 4 90.4 30.6 107 37.1 3.6 88.0 5.0 AR06005) 12.1 2.2 4.8 <td>22</td> <td>LA9535D118-4</td> <td>ω</td> <td>86.6</td> <td>31.5</td> <td>106</td> <td>42.7</td> <td>3.6</td> <td>0.0</td> <td>3.3</td> <td>4.0</td>	22	LA9535D118-4	ω	86.6	31.5	106	42.7	3.6	0.0	3.3	4.0
LA953D36-5 15 79.1 31.2 106 38.5 2.4 0.0 3.3 LA966BIB77 23 75.1 29.3 105 38.3 3.0 0.0 4.7 AR0289-9 20 77.6 31.4 94 43.1 4.6 63.0 4.3 AR0258-4 17 78.5 32.9 107 36.1 52.0 4.7 AR0258-7 4 90.4 32.0 104 34.0 3.8 48.0 4.0 AR0259-3 29 64.6 30.6 107 37.1 3.6 88.0 5.0 Average 79.8 31.1 104 38.3 3.6 28.4 4.3 LSD(0.05) 12.1 2.2 4.8 2.5 1.6 24.0 ns CV% 18.9 8.0 5.2 7.5 41.3 26.9 Average 12.1 10 10 10 8 2.3 3	23	LA966BIB-151-1	ι Ω	90.1	30.9	105	41.2	2.2	0.0	4.7	2.6
LA966BIB77 23 75.1 29.3 105 38.3 3.0 0.0 4.7 AR0289-9 20 77.6 31.4 94 43.1 4.6 63.0 4.3 AR0258-4 17 78.5 32.9 107 36.6 2.4 52.0 4.7 AR0213-12 10 83.2 29.2 107 36.1 3.3 53.5 3.7 AR0258-7 4 90.4 32.0 104 34.0 3.8 48.0 4.0 AR0292-3 29 64.6 30.6 107 37.1 3.6 88.0 5.0 AR0292-3 29 64.6 30.6 107 37.1 3.6 88.0 5.0 AR0292-3 29 64.6 30.6 107 37.1 3.6 88.0 5.0 AR0292-3 12.1 2.2 4.8 2.5 1.6 24.0 ns CV% 18.9 8.0 5.2 7.5 41.9 2.6 9 ANO. Locations 12 10 10 <td< td=""><td>24</td><td>LA9533D36-5</td><td>15</td><td>79.1</td><td>31.2</td><td>106</td><td>38.5</td><td>2.4</td><td>0.0</td><td>3.3</td><td>4,8</td></td<>	24	LA9533D36-5	15	79.1	31.2	106	38.5	2.4	0.0	3.3	4,8
AR0289-9 20 77.6 31.4 94 43.1 4.6 63.0 4.3 AR0258-4 17 78.5 32.9 107 36.6 2.4 52.0 4.7 AR0213-12 10 83.2 29.2 107 35.1 3.3 53.5 3.7 AR0258-7 4 90.4 32.0 104 34.0 3.8 48.0 4.0 AR0292-3 29 64.6 30.6 107 37.1 3.6 88.0 5.0 Average 79.8 31.1 104 38.3 3.6 28.4 4.3 LSD(0.05) 12.1 2.2 4.8 2.5 1.6 24.0 ns CV% 18.9 8.0 5.2 7.5 41.9 41.3 26.9 No. Locations 12 10 10 10 8 2 3	22	LA966BIB77	23	75.1	29.3	105	38.3	3.0	0.0	4.7	5.6
AR0258-4 17 78.5 32.9 107 36.6 2.4 52.0 4.7 AR0213-12 10 83.2 29.2 107 35.1 3.3 53.5 3.7 AR0258-7 4 90.4 32.0 104 34.0 3.8 48.0 4.0 AR0292-3 29 64.6 30.6 107 37.1 3.6 88.0 5.0 ANerage 79.8 31.1 104 38.3 3.6 28.4 4.3 LSD(0.05) 12.1 2.2 4.8 2.5 1.6 24.0 ns CV% 18.9 8.0 5.2 7.5 41.9 41.3 26.9 No. Locations 12 10 10 10 8 2 3	26	AR0289-9	50	77.6	31.4	94	43.1	4.6	63.0	4.3	4.0
AR0213-12 10 83.2 29.2 107 35.1 3.3 53.5 3.7 AR0258-7 4 90.4 32.0 104 34.0 3.8 48.0 4.0 AR0292-3 29 64.6 30.6 107 37.1 3.6 88.0 5.0 Average 79.8 31.1 104 38.3 3.6 28.4 4.3 LSD(0.05) 12.1 2.2 4.8 2.5 1.6 24.0 nsi CV% 18.9 8.0 5.2 7.5 41.9 41.3 26.9 No. Locations 12 10 10 8 2 3	27	AR0258-4	. 4	78.5	32.9	107	36.6	2.4	52.0	4.7	2.0
AR0258-7 AR0292-3 AR0292-3 AR0292-3 Average Average Average CV% ANO. Locations AR0258-7 AR0292-3 AR029	28	AR0213-12	9	83.2	29.2	107	35.1	3.3	53.5	3.7	2.0
AR0292-3 29 64.6 30.6 107 37.1 3.6 88.0 5.0 Average 79.8 31.1 104 38.3 3.6 28.4 4.3 LSD(0.05) 12.1 2.2 4.8 2.5 1.6 24.0 ns CV% 18.9 8.0 5.2 7.5 41.9 41.3 26.9 No. Locations 12 10 10 8 2 3	29	AR0258-7	4	90.4	32.0	104	34.0	3.8	48.0	4.0	2.6
79.8 31.1 104 38.3 3.6 28.4 4.3 12.1 2.2 4.8 2.5 1.6 24.0 nsi 18.9 8.0 5.2 7.5 41.9 41.3 26.9 12 10 10 10 8 2 3	8	AR0292-3	29	64.6	30.6	107	37.1	3.6	88.0	5.0	2.3
12.1 2.2 4.8 2.5 1.6 24.0 ns 18.9 8.0 5.2 7.5 41.9 41.3 26.9 12 10 10 10 8 2 3		Average		79.8	31.1	104	38.3	3.6	28.4	4.3	4.0
18.9 8.0 5.2 7.5 41.9 41.3 26.9 12 10 10 10 8 2 3		LSD(0.05)	***	12.1	2.2	4.8	2.5	1,6	24.0	SU	4.8
12 10 10 10 8 2 3		CV%		18.9	8.0	5.2	7.5	41.9	41.3	26.9	31.3
		No. Locations		12	10	10	10	8	2	3	4

Midville, Georgia:

Oat Grain Performance, 2003-2004

	Yie	eld ¹				2004 D	eta		
•	3-Year	2-Year			Test	200, D		Winter	Head
Brand-Variety	Average	Average	Rank	Yield ¹	Wt	Ht	Lodg.	Survival	Date
	— bu/a	acre		bu/acre	lb/bu	in	%	%	mo/day
Secretariat									
Horizon 321	90.3	91.4	7	114.6	33.8	29	0	100	04/12
Harrison	83.3	83.1	15	105.5	38.6	25	0	100	04/13
	82.3	86.9	3	120.1	39.2	32	0	100	04/10
Rodgers	81.2	85.8	13	105.8	35.1	32	0	100	04/10
Plot Spike LA9339	80.1	83.0	16	104.6	35.5	32	0	100	04/14
Chapman	76.5	84.4	5	117.1	33.6	23	0	.100	04/10
C 227	75.6	82.0	8	111.5	33.0	32	0	100	04/07
Horizon 314	73.7	88.2	4	118.9	36.6	30	0	100	04/07
Horizon 474	72.1	65.0	12	105.9	38.3	27	0	100	
NC97-8885		91.0	1	122.2	38.3	28	0	100	04/08. _04/13
TV04000U.o									
TX01CSRH Sel 1	•	84.6	9	109.6	38.3	28	0	100	04/11
Florida 501	•	81.2	2	121.8	38.7	32	0	100	04/07
NK-Coker 820			6	115.1	40.0	30	0	100	04/06
Walken		•	10	107.9	27.8	36	0	100	04/17
LA9810SBS-58	-	-	11	107.1	36.4	31	0	100	04/12
AR0213-3			14	105.7	34.1	24	0	100	04/45
LA989SBS-49-B-S1		-	17	104.5	36.2	30		100	04/15
LA966BSB119-1	_	-	18	100.1	29.8	31	0	100	04/14
LA98002SBS-26-B-S1			19	99.0	25.6 35.6	33		•	04/10
LA976GBS-22-B-S2	·	•	20	96.2			0	100	04/12
	•	•	. 20	90.2	37.3	29	0	100	04/09
AR0258-7		•	21	95.0	30.4	27	0	100	04/13
Average	79.4	83.9		108.9 ²	35.5	29	0	100	04/11
LSD at 10% Level	N.S. ³	N.S.		13.0	5.5	4	•	100	02
Std. Err. of Entry Mean	5.3	4.0		5.5	2.3	2	-	-	.02

- 1. Yields calculated as 32 pounds per bushel at 12.5% moisture.
- 2. C.V. = 10.1%, and df for EMS = 60.
- 3. The F-test indicated no statistical difference at the alpha = 0.10 probability level; therefore, a LSD value was

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:

November 20, 2003.

Harvested:

June 3, 2004.

Seeding Rate: 11 seeds per foot in 7" rows.

Soil Type:

Dothan loamy sand.

Soil Test:

P = Medium, K = Medium, and pH = 6.0.

Fertilization:

Preplant: 25 lb N, 50 lb P₂O₅, and 75 lb K₂O/acre.

Topdress: 80 lb N/acre.

Management: Chisel plowed and rototilled.

Previous Crop: Cotton.

Test conducted by A. E. Coy, M. D. Pippin, R. Burton, and R. Brooke.

Table 6

Griffin, Georgia: Oat Grain Performance, 2003-2004

	100	1	0.101	manc	e, 200	3-200	+		
		eld ¹				2004 D	ata		
Brand-Variety	3-Year	2-Year			Test			Winter	Head
Brand-Variety		Average	Rank	Yield ¹	Wt	Ht	Lodg.	Survival	Date
	bu/	acre		bu/acre	lb/bu	in	%	%	mo/day
Plot Spike LA9339	82.4 .	95.1	1	76.7	32.8	35	0	100	04/23
Rodgers	80.0	90.1	3	71.8	31.3	37	.0	100	
Horizon 474	74.0	80.9	6	57.5	31.2	33	0		04/15
Horizon 314	72.4	80.4	16	40.8	29.5	35		100	04/10
Horizon 321	69.8	86.9	8	52.0	30.3	35 31	0 0	100 100	04/22 04/14
Harrison						01	Ü	100	04/14
Secretariat	68.4	79.9	7	53.1	32.3	37	0	100	04/14
	67.3	71.7	15	42.7	30.5	32	0	100	04/13
Chapman	66.0	73.9	14	42.9	27.2	28	Ō	100	04/13
C 227	60.7	65.2	12	47.0	30.4	34	Ō	100	04/13
NC97-8885		90.9	2	74.7	_ 33.2	31	Ö	100	04/15
TX01CSRH Sel 1									
Florida 501	•	68.8	17	40.4	29.7	31	0	100	04/12
LA9810SBS-58	•	53.3	21	31.9	28.2	29	0	100	04/09
AR0258-7		•	4	60.1	33.6	36	0	100	04/18
	•	•	5	60.1	30.4	27	0	100	04/20
AR0213-3	•		9	47.6	30.8	27	0	100	04/23
-A98002SBS-26-B-S1			10	47 5	207		_		
Valken	•	•		47.5	30.7	32	0	100	04/19
A966BSB119-1	•	•	11	47.2	29.1	37	0	100	05/04
A976GBS-22-B-S2	•	•	13	45.1	30.1	33	0	100	04/21
VK-Coker 820	•	•	18	40.2	31.8	32	0	100	04/20
OOKO! OZO	•	•	19	36.3	29.8	33	0	100	04/09
A989SBS-49-B-S1		•	20	34.4	32.0	32	0	100	04/23
verage	71.2	78.1		50.0 ²	30.7	32	0	100	04/17
SD at 10% Level	N.S. ³	9.7		9.6	1.8	4	U	100	
td. Err. of Entry Mean	3.3	4.1		4.1	0.8	2	<u> </u>		02 01

- 1. Yields calculated as 32 pounds per bushel at 12.5% moisture.
- 2. C.V. = 16.3%, and df for EMS = 60.
- 3. The F-test indicated no statistical difference at the alpha = 0.10 probability level; therefore, a LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:

October 15, 2003.

Harvested:

May 26, 2004.

Seeding Rate: 11 seeds per foot in 7" rows.

Soil Type:

Cecil sandy clay loam.

Soil Test:

P = High, K = High, and pH = 6.4.

Fertilization:

Preplant: 28 lb N, 56 lb P_2O_5 , and 84 lb K_2O /acre.

Topdress: 70 lb N/acre.

Management:

Chisel plowed, disked, and rototilled; Harmony Extra used for weed control.

Previous Crop: Soybean.

Test conducted by P. A. Rose,

Table 7

Winter Oat Survival Data Summary at Various Stations (sorted by rank) (Uniform Winterhardiness Nursery, 2000-01)

Noviline (ck) 1 G3.6 S24.4 B0.0 91.8 Konno Intingency Konno Print	Ent.	Entry		Ranked	Means	Kromeriz	Petkus	Martnvasr	. Manhattan		Waynesville	Waynesville Radzikow	Knoxville	Prosper	Blackshurg
Norline (ck) 1 63.6 54.4 80.0 91.8 55.0 0.0 75.0 34.5 50.0 95.0 75.0 34.5 50.0 95.0 75.0 35.0 40.5 15.0 95.0 95.0 40.5 15.0 95.0 95.0 40.5 15.0 95.0 95.0 95.0 40.5 45.5 45.5 45.5 45.5 45.5 45.5 45.5 45.5 45.5 45.0 100.0 IXX00D1485 5 56.0 58.7 70.0 87.7 55.0 0.0 82.5 57.5 3.0 100.0 IXX00D1485 5 56.0 58.7 75.0 91.0 0.0 82.5 3.0 100.0	No.			Moans	(across loc)	Czech Rep	. Соппану	Hungary	Kansas	Lithurania	NC	Poland	ΝĻ	ĭ	۷A
Windok (ck) 2 62.5 52.3 80.0 68.7 60.0 0.0 87.5 46.5 15.0 100.0 TX 98D208 3 57.4 59.8 75.0 89.7 15.0 0.9 75.0 45.5 17.5 100.0 TX 98D208 3 57.4 59.8 75.0 89.7 15.0 0.9 75.0 45.5 17.5 100.0 NC 97-8885 5 56.0 58.7 70.0 87.4 25.0 0.0 82.5 57.5 100.0 IV 97-8885 5 56.8 56.7 75.0 91.0 0.0 82.5 57.5 100.0 IV 97-8349 7 55.8 37.7 75.0 97.4 30.0 75.0 40.0 75.0 97.5 <	2	Norline (ck)		-	63.6	54.4	80,0	91.8	55.0	0.0	.75.0	34.5	50.0	95.0	100.0
TX 98D208 3 57.4 59.8 75.0 89.7 15.0 95.0 75.0 45.5 17.5 17.0 17.0 17.0 17.0 17.0 17.5 17.5 17.5 17.5 17.5 17.5 17.0 17.0 17.5 17.5 17.5 17.0 17.0 17.0 17.5 17.5 17.0 17.0 17.0 17.5 17.5 17.0 <	4	Wintok (ck)		7	62.5	52.3	80.0	, 88.7	60.0	0.0	87.5	46.5	15.0	100.0	95.0
TX00D185 4 56.1 64.7 80.0 9.5 35.0 0.9 22.5 57.5 3.0 100.0 IVX0D1865 5 56.0 58.7 70.0 81.4 25.0 0.0 82.5 57.5 3.0 100.0 LPWH 992210 6 55.8 37.7 75.0 91.0 0.0 1.1 77.5 52.0 0.0 100.0 SC941348 7 55.8 37.7 75.0 97.4 30.0 2.0 40.0 43.5 25.0 100.0 SC941348 7 55.8 37.7 75.0 97.4 30.0 2.0 43.5 37.5 100.0 SC941348 7 55.8 37.7 75.0 97.4 30.0 75.0 10.7 17.5	7	TX 98D208		က	57.4	.59.8	75.0	7.68	15.0	6.0	75.0	45.5	17.5	100.0	Est=96.1 [©]
NC 97-8885 5 56.0 58.7 70.0 87.4 25.0 0.0 82.5 29.0 75 100.0 IPWH 992210 6 55.3 62.6 75.0 91.0 0.0 1.1 77.5 52.0 0.0 100.0 SC941348 7 55.8 37.7 75.0 97.4 30.0 2.0 40.0 43.5 37.5 97.5 SC941348 7 55.8 37.7 75.0 97.4 30.0 2.0 40.0 43.5 97.5<	රා	TX00D185		4	56.1	64.7	80.0	5.76	35.0	6.0	22.5	57.5	3.0	100.0	100.0
EPWH 992210 6 55.9 62.6 75.0 91.0 0.0 1.1 77.5 52.0 100.0 SC941348 7 55.8 37.7 75.0 97.4 30.0 20.0 40.0 43.5 37.5 97.5 SC910337 8 55.7 46.9 70.0 90.9 25.0 0.0 75.0 37.0 17.5 100.0 TX00D430 9 54.8 52.4 65.0 67.7 12.5 12 80.0 37.0 17.5 100.0 Wistar 10 53.2 67.9 80.0 81.2 7.5 3.8 45.0 47.0 7.5 100.0 Wistar 10 53.2 67.0 80.0 81.2 6.0 7.5 3.9 45.0 7.5 100.0 Wistar 12 60.7 67.0 80.0 2.5 3.9 50.0 27.5 55.0 97.5 LPWH 992183 14 48.2 7.0	9	NC 97-8885		5	56.0	58.7	70.0	87.4	. 25.0	0.0	82.5	29.0	7.5	100.0	100.0
SC941348 7 55.8 37.7 75.0 97.4 30.0 2.0 40.0 43.5 37.5 97.5 SC910337 8 55.7 46.9 70.0 90.9 25.0 0.0 75.0 37.0 17.5 100.0 TX00D433 9 54.8 55.4 65.0 67.7 12.5 1.2 80.0 37.0 37.5 100.0 Wistar 10 53.2 67.9 67.0 80.5 2.2 65.0 37.0 37.5 95.0 Winter Turf (ck) 12 67.0 80.0 80.5 2.5 3.9 50.0 27.5 95.0 Winter Turf (ck) 12 67.0 80.0 84.2 2.5 3.9 50.0 27.5 95.0 LPWH 992183 14 48.2 70.0 87.2 2.5 3.9 50.0 21.5 97.0 LPWH 992183 14 48.2 7.0 87.0 1.3 4.0 3.0 <td< td=""><td>13</td><td>LPWH 992210</td><td></td><td>9</td><td>55.9</td><td>62.6</td><td>75.0</td><td>91.0</td><td>0.0</td><td>1.1</td><td>77.5</td><td>52.0</td><td>0.0</td><td>100.0</td><td>100.0</td></td<>	13	LPWH 992210		9	55.9	62.6	75.0	91.0	0.0	1.1	77.5	52.0	0.0	100.0	100.0
SCS10337 8 55.7 46.9 70.0 90.9 25.0 0.0 75.0 37.0 17.5 10.0 TX00D430 9 54.8 52.4 65.0 67.7 12.5 1.2 80.0 37.0 37.5 95.0 Wistar 10 53.2 67.9 75.0 81.2 7.5 3.8 45.0 47.0 7.5 100.0 NC 97-8349 11 51.3 74.4 65.0 80.5 0.0 2.2 65.0 7.5 100.0 Winter Turf (ck) 12 50.7 67.0 80.0 84.2 2.5 3.9 50.0 27.5 95.0 TX98D662. 13 50.2 67.0 80.0 87.2 0.0 0.0 45.0 97.5 97.5 LPWH 992183 14 48.2 71.3 70.0 87.2 0.0 0.0 1.3 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 </td <td>18</td> <td>SC941348</td> <td>:</td> <td>7</td> <td>55.8</td> <td>37.7</td> <td>75.0</td> <td>97.4</td> <td>30.0</td> <td>2.0</td> <td>.40.0</td> <td>43.5</td> <td>37.5</td> <td>97.5</td> <td>97.5</td>	18	SC941348	:	7	55.8	37.7	75.0	97.4	30.0	2.0	.40.0	43.5	37.5	97.5	97.5
430 9 54.8 52.4 65.0 67.7 12.5 1.2 80.0 37.0 37.5 95.0 8349 10 53.2 67.9 75.0 81.2 7.5 1.2 80.0 37.0 37.5 100.0 8349 11 51.3 74.4 65.0 80.5 0.0 2.2 65.0 27.5 5.5 100.0 1m(ck) 12 50.7 67.0 80.0 84.2 2.5 3.9 50.0 27.5 5.5 95.0 662 13 67.0 80.0 84.2 2.5 3.9 50.0 27.5 5.0 97.5 95.0 97.5 97.5 95.0 97.5	16	SC910337		· @	55.7	46.9	70.0	6.06	25.0	0.0	75.0	37.0	17.5	100.0	95.0
10 53.2 67.9 75.0 81.2 7.5 3.8 45.0 47.0 7.5 100.0 8349 11 51.3 74.4 65.0 80.5 0.0 2.2 65.0 27.5 5.5 55.0 Turf (ck) 12 50.7 67.0 80.0 84.2 2.5 3.9 50.0 21.5 9.7 95.0 662 13 60.0 60.0 87.2 0.0 0.0 45.0 35.5 5.0 97.5 97.5 992183 14 48.2 70.0 87.4 0.0 1.3 44.0 35.0 97.5 97.5 97.5 97.5 97.5 97.5 97.5 97.6 97.5 97.8 97.7 97.6 97.7 97.8 97.9 </td <td>10</td> <td>TX00D430</td> <td></td> <td>· 6</td> <td>54.8</td> <td>52.4</td> <td>65.0</td> <td>2.79</td> <td>.12.5</td> <td>1.2</td> <td>80.0</td> <td>37.0</td> <td>37.5</td> <td>95.0</td> <td>100.0</td>	10	TX00D430		· 6	54.8	52.4	65.0	2.79	.12.5	1.2	80.0	37.0	37.5	95.0	100.0
-8349 11 51.3 74.4 65.0 80.5 0.0 22 65.0 27.5 55.0 55.	12	Wistar		10	53.2	6.79	75.0	81.2	7.5	3,8	45.0	.47.0	7.5	100.0	97.5
Tunf (ck) 12 50.7 67.0 80.0 84.2 2.5 3.9 50.0 21.5 0.0 97.5 9662. 13 50.2 62.0 70.0 87.2 0.0 0.0 45.0 35.5 5.0 97.5 992183 14 48.2 41.3 70.0 83.4 0.0 1.3 44.0 33.0 10.0 100.0 2117 15 44.3 26.7 75.0 71.3 0.0 1.5 22.5 30.5 10.0 100.0 2246 16 44.3 45.6 70.0 84.9 0.0 1.5 22.5 30.5 12.5 95.0 1m (ck) 17 34.4 28.1 55.0 67.6 5.0 0.0 3.0 10.5 10.0 92.5 1m (ck) 18 33.4 26.0 60.0 5.0 50.0 50.0 10.5 10.0 92.8 1m (ck) 10.5 15.1 15.1	5	NC 97-8349		=	51.3	74.4	65.0	80.5	0.0	2.2	65.0	27.5	5.5	95.0	97.5
5662. 13 50.2 62.0 70.0 87.2 0.0 45.0 45.0 35.5 5.0 97.5 992183 14 48.2 41.3 70.0 83.4 0.0 1.3 44.0 33.0 10.0 100.0 2117 15 44.3 26.7 75.0 71.3 0.0 3.0 21.0 0.0 10.0 10.0 100.0<	က	Winter Turf (ck)		. 12	50.7	67.0	80.0	84.2	.2.5	3.9	50.0	21.5	0.0	97.5	100.0
992183 14 48.2 41.3 70.0 83.4 0.0 1.3 44.0 33.0 10.0 100.0 2117 15 44.3 26.7 75.0 71.3 0.0 3.0 50.0 21.0 0.5 100.0 1246 16 44.3 45.6 70.0 84.9 0.0 1.5 22.5 30.5 12.5 95.0 1m (ck) 17 34.4 28.1 55.0 67.6 5.0 0.0 3.0 0.0 92.5 -8972N 18 33.4 26.0 60.0 -64.3 0.0 0.0 5.0 10.5 1.0 95.0 -8972N 18 33.4 26.0 60.0 -64.3 0.0 0.0 5.0 10.5 1.0 95.0 -90Averages 51.7 10.8 9.6 10.6 15.1 15.1 12.7 19.7 19.7 18.4 -10.5 10.8 9.9 6.4 6.0	80	TX98D662		13	50.2	62.0	70.0	87.2	0.0	0.0	45.0	35.5	5.0	97.5	100.0
2117 15 44.3 26.7 75.0 71.3 0.0 3.0 50.0 21.0 0.5 100.0 1246 16 44.3 45.6 70.0 84.9 0.0 1.5 22.5 30.5 12.5 95.0 1m (ck) 17 34.4 28.1 55.0 67.6 5.0 0.0 3.0 0.0 92.5 -8972N 18 33.4 26.0 60.0 64.3 0.0 0.0 5.0 10.5 1.0 95.0 ion Averages 51.7 51.6 71.7 83.7 15.1 12.5 52.5 34.0 12.6 97.8 10.5 10.5 10.6 10.6 15.0 15.7 19.7 18.7 18.7 21.2 19.7 18. 26.8 9.9 6.4 6.0 150.3 183.4 62.7 29.6 73.7 3.0	7	LPWH 992183	-	4	48.2	41.3	70.0	83.4	.0:0	1.3	44.0	33.0	10.0	100.0	98.5
1246 16 44.3 45.6 70.0 84.9 0.0 1.5 22.5 30.5 12.5 95.0 Jam (ck) 17 34.4 28.1 55.0 67.6 5.0 0.0 3.0 3.0 0.0 92.5 B972N 18 33.4 26.0 60.0 60.0 64.3 0.0 0.0 5.0 10.5 1.0 95.0 Ion Averages 51.7 51.6 71.7 83.7 15.1 1.2 52.5 34.0 12.6 97.8 Ion Averages 51.7 10.8 9.6 10.6 ins* ins* 13.7 30 26.8 9.9 6.4 6.0 150.3 183.4 62.7 29.6 73.7 30	15	LPS 22117		15	44.3	. 26.7	75.0	71.3	0.0	3.0	50.0	21.0	0.5	100.0	95.0
Im (ck) 17 34.4 28.1 55.0 67.6 5.0 0.0 3.0 3.0 0.0 92.5 -8972N 18 33.4 26.0 60.0 64.3 0.0 0.0 5.0 10.5 1.0 95.0 Ion Averages 51.7 51.6 71.7 83.7 15.1 1.2 52.5 34.0 12.6 97.8 Ion Averages 10.5 10.8 9.6 10.6 ns* ns* 19.7 ns* 26.8 9.9 6.4 6.0 150.3 183.4 62.7 29.6 73.7 3.0	17	SC961246		16	44.3	.45.6	70.0	84.9	0.0	1,5	22.5	30.5	12.5	95.0	80.0
-8972N 18 33.4 26.0 60.0 60.0 60.0 5.0 10.5 1.0 95.0 lon Averages 51.7 51.6 71.7 83.7 15.1 1.2 52.5 34.0 12.6 97.8 10.5 10.8 9.6 10.6 ns* ns* ns* 21.2 19.7 ns* 26.8 9.9 6.4 6.0 150.3 183.4 62.7 29.6 73.7 3.0	÷	Fulghum (ck)		17	34.4	28.1	55.0	9.79	5.0	0.0	3.0	3.0	0.0	92.5	0.06
ion Averages 51.7 51.6 71.7 83.7 15.1 1.2 52.5 34.0 12.6 97.8 10.5 10.8 9.6 10.6 ns* ns* 21.2 19.7 ns* 26.8 9.9 6.4 6.0 150.3 183.4 62.7 29.6 73.7 3.0	1	NC 97-8972N		18	33.4	26.0	0.09	64.3	0.0	0.0	5.0	10.5	1.0	95.0	72.5
10.5 10.8 9.6 10.6 ns* ns* 21.2 19.7 ns* 26.8 9.9 6.4 6.0 150.3 183.4 62.7 29.6 73.7 3.0		Location Avera	ages	٠.	51.7	51.6	7.17	83.7	: 15,1	1.2	52.5	34.0	12.6	8.76	95.3
26.8 9.9 6.4 6.0 150.3 183.4 62.7 29.6 73.7 3.0		rsp			10.5	10.8	9.6	10.6	ПS	.su	ns*	21.2	19.7	, ns*	11.2
		CV(%)			26.8	6.6	6.4	6.0	150.3	183.4	62.7	. 29.6	73.7	3.0	5.6

@ Estimated value. *ns; Not significant.

 Table 8

 Winter Oat Survival Data Summary (%) at Various Stations (sorted by rank)

(Uniform Oat Winterhardiness Nursery, 2001-02)

													ī			U	ء 1
Biksbrg Abrstwyth	Wales	6.96	93.4	95.7	78.9	91.2	76.9	87.5	85.9	67.2	70.5	91.4	78.8	84.5	.su	10	
Blksbrg	۸۸	100.0	100.0	100.0	100.0	67.5	100.0	92.5	100.0	100.0	92.5	100.0	92.5	95.4	.su	14.8	
Esksehr	Turkey	10.0	5.0	5.0	20.0	5.0	10.0	20.0	15.0	0.0	0.0	10.0	10.0	9.2	, su	100.5	
Bshland	X	90.0	77.5	97.5	92.5	42.5	30.0	45.0	25.0	40.0	32.5	12.5	17.5	50.2	47.5	42.9	
Knxvil	ΙN	100.0	95.0	95.0	95.0	85.0	80.0	90.0	87.5	95.0	95.0	95.0	90.0	91.9	us	9,4	
Radzkow Knxvil Bshland	Poland	100.0	97.5	99.0	93.5	90.5	89.0	85.5	93.5	64.5	93.5	94.0	85.0	90.5	12.4	6.3	
	Lithuania	91.2	80.0	26.3	8.8	Est=29.8 [@]	Est=29.5 [®]	6.3	7.5	49.5	25.0	10.0	0.0	30.3	17.0	23.6	
Manhtan	KS	17.5	7.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	7.0	149.1	
Martnvasr Manhtan	Hungary	98.6	2.06	100.0	84.2	79.3	78.7	74.2	73.8	72.5	78.4	84.6	78.4	82.8	10.6	5.8	
Petkus	Germany	75.0	65.0	80.0	70.0	70.0	70.0	75.0	0.09	0.09	65.0	55.0	30.0	64.6	15.5	10.9	
Faytvil Kromenz	Czech Rep	100.0	100.0	97.3	75.0	0.96	89.8	82.1	0.66	8.99	52.7	37.7	24.7	76.8	24.8	14.7	
Faytvil	AR	97.5	100.0	97.5	92.5	97.5	92.5	87.5	90.0	92.5	97.5	97.5	80.0	93.5	ns*	5.6	
Means	Means (across loc)	81,4	76.0	74.5	67.5	67.9	62.2	62.1	61.4	29.0	28.6	57.3	48.9	64.3	20.9	15.7	
Ranked	Means	-	2	က	4	ľ.	9	7	œ	6	10	-	12				
Entry		Wintok (ck)	Norline (ck)	NC 97-8885	LPWH 992213	95-43Cn 4	95-43Cn 5	LPWH 992209	LPWH 992212	Wistar	Winter Turf (ck)	NC 97-8972N	Fulghum (ck)	Location Averages	LSD (0.05)	CV(%)	
Ent.	Š.	4		۳۲.	10	7	12	∞	5	7	ຕ	9	-	_			

@ Estimated value.
*ns: Not significant.

Exhibit B. Statement of Distinctness SS 76-40 Oat.

SS 76-40 oat is uniquely different from all known cultivars. In comparison to oat cultivars with which it has been evaluated, SS 76-40 is most similar to Rodgers (PI 593020) in heading date (Tables 1-4, and 6). However, SS 76-40 has a shorter plant stature (Table 9).

Table 9. Two trials for comparison of plant height evaluated at Kinston NC during the 2000-01 and 2001-02 seasons. Analyses on normally distributed data using the Proc GLM proceedure of the SAS sofware

Kinston Ur	niform Oat	Nursery, 2	2000-01.	·*··
	Plant		Trial	Comparison
Variety	Height	Range	Plant No.	Plant No.
	cm			
SS 76-40	99	97-102	>1000	> 30
Rodgers	111	109-114	>1000	> 30
LSD (0.05)	8			

Kinston Oa	t Advance	ed Test 200	1-02.	·
	Plant		Trial	Comparison
Variety	Height	Range	Plant No.	Plant No.
	cm			
SS 76-40	99	97-102	>1000	> 30
Rodgers	109	107-112	>1000	> 30
LSD (0.05)	8			

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U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705

Exhibit C

OBJECTIVE DESCRIPTION OF VARIETY Oat (Avana snn.)

	Oat (Avena Spp.)		
NAMEOFAPPUCANTS North Carolina N.G. Agricultural Research Service	TEMPORARY OR EXPERIMENTAL DESIGNATION NC97-8885	VARIETY NAME SS 76-	40
ADDRESS (Street and No. or RD No., City, State, Zip Code, and Count BOX 7643, Patterson Hall N.C. State University Raleigh, NC 27695-7643	יני	Pypo number 200500	3 2 <i>7</i>
Place the appropriate number that describes the value $\begin{bmatrix} 0 & 8 & 9 \end{bmatrix}$ or $\begin{bmatrix} 0 & 9 \end{bmatrix}$) when the number is	rietal character of this variety in the boxes belo either 99 or less or 9 or less.	ow. Place a zero in the first box	
SPECIES: 1 = Sativa 2 = Byzantina	3 = Other (Specify)		
S. GROWTH HABIT: 1 1 = Winter 2 = Semi-Winter 2 Juvenile Growth: 1 = Prostrate	3 = Spring 2 = Semi-Prostrate 3 = Erect		
MATURITY: (50% Flowering) 1 1 2 Number of days 0 5 No. Days Farlier Than *Harri	oon/Table 4)		
U 5 No. Days Earlier Than <u>∗Harri</u> Same as Check <u>∗ Rodg</u>	son(Table 4) ers		
No. of Days Later Than *None 4 Season: 1 = Very E 4 = Late (L	arly (Jaycee) 2 = Early (Nodaway 70) 3 = Mi odi) 5 = Very Late (Gerry) 6 = Extremely Lat	dseason (Clintford) te (Mackinaw)	· · · · · · · · · · · · · · · · · · ·
PLANT HEIGHT: (From Soil Level to Top of Heat 1 1 0 cm Tail	d)		
1 1 cm Shorter Than * Rodge	ers		
-1-1 cm Shorter than		the state of the s	
Same as Check * None			

^{*} Relative to a Commercial Variety Grown in the Same Trial

5	STEM:					
	1	Diameter: 1 = Fine (Kherson) 2 = Medium (Clintford) 3 = Coarse (Nodaway 70)				
		Hairiness at Upper Culm Nodes: 1 = Hairless 2 = Hairy				
		Mature Stem Color 1 = Yellow 2 = Reddish				
6.	1 1 1 5	Leaf Color: The Royal Horticultural Society's or any recognized color chart should be used to determine the leaf color of the described ariety.) Carriage: 1 = Drooping (Random) 2 = Erect (Walken) Color: 1 = Yellow Green 2 = Light Green 3 = Dark Green 4 = Blue Green mm Width (First leaf below flag leaf) Leaf Margin: 1 = Glabrous 2 = Ciliate				
	2	Ligule: 1 = Absent 2 = Present $\boxed{1}$ Leaf Sheath: 1 = Hairless 2 = Hairy				
7.	1 2 2 1 9	Panicle Shape: 1 = Equilateral 2 = Intermediate 3 = Side Panicle (Unilateral) Attachment of Lower Whorl of Branches: 1 = First Node 2 = Second Node (False Node) Panicle Size: 1 = Samll (Yancey) 2 = Medium (Walken) 3 = Large (Markton) Panicle Width: 1 = Narrow (Gopher) 2 = Midbroad (Yancy) 3 = Broad (Nodaway 70) cm Panicle Length				
8.	RACHIS:	1 = Recurved (Yancey) 2 = Erect (Walken)				
9.	SPIKELE 2 1 2 0	Spikelet Separation by: 1 = Abscission 2 = Semi-Abscission 3 = Fracture Floret Separation by: 1= Disarticulation 2 = Heterofracture 3 = Basifracture Florets per Spikelet (Mean no.)				
10.	GLUMES	Glume Color: The Royal Horticultural Society's or any recognized color chart should be used to determine the leaf color of the				
	0 6	mm Width Market Market				
11.	LEMMA: (Lemma Color: The Royal Horticultural Society's or any recognized color chart should be used to determine the leaf color of t described variety.)					
	L1 5	mm Length 2 Color: 1 = White 2 = Yellow 3 = Red 4 = Gray 5 = Black				
	1	Hairiness of Dorsal Surface: 1 = Hairless 2 = Hairy RHS Greyed-Yellow Group 161B				
12.	AWN: (Fi	rst Floret)				
	1	Occurrence: 1 = Absent (Walken) 2 = Infrequent (Yancey) 3 = Common (Chilocco) 4 = Frequent (Random) Type: 1 = Non-twisted 2 = Twisted Geniculate 3 = Twisted Geniculate				

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13. SEED:		olet Light: 1 = Florescent = Absent (Florida 501) = Several to Numerous (Florilee)	2 = Non-florescent 2 = Absent to Few (Ya 5 = Numeraus (Red F	ancey) 3 = Few to Several (Lee) tustproof)		
2 8 1 9	mm Basal Hair Length 4 gms per 1000 Seeds 1 % Groat Protein	[2]	mg Groat Weight (Ead	ch)		
14. INSECTS: (0 = Not Tested 1 = Susceptible 2 = Resistant) 1						
15. DISEASE: (0 = Not Tested 1 = Susceptible 2 = Resistant) O Halo Blight O Powdery Mildew O Septoria Leaf Blotch O Soil-Borne Mosaic Helminthosporium Leaf Blotch O Victoria Blight O Other (Specify)						
1	Specify Races Tested: Crown Rust	Races Susceptible Complex in SE USA		Races Resistant Not Tested		
0	Stem Rust Covered Smut Loose Smut					
16. INDICATE THE VARIETY YOU BELIEVE MOST CLOSELY TO RESEMBLE THAT SUBMITTED:						
	CHARACTER	VARIETY	CHARACTER	VARIETY		
Plant Tiller	ing	RODGERS	Leaf Color	Rodgers		
Leaf Size		Rodgers Brooks	Leaf Carriage	Rodgers		
Seed Colo	produce and the second control of the second	טויטטוגס	Cood Chang	Podgove		

COMMENTS:

REPRODUCE LOCALLY. Include form number and edition date on all reproductions. FORM APPROVED - OMB No. 0581~0055 U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held **EXHIBIT E** confidential until the certificate is issued (7 U.S.C. 2426). STATEMENT OF THE BASIS OF OWNERSHIP 1. NAME OF APPLICANT(S)
North Carolina 2. TEMPORARY DESIGNATION 3. VARIETY NAME OR EXPERIMENTAL NUMBER SS 76-40 N. C. Agricultural Research Service NC97-8885 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) 5. TELEPHONE (Include area code) 6. FAX (Include area code) (919) 515-2718 (919) 515-7745 Box 7643, Patterson Hall, N. C. State University 7. PVPO NUMBER Raleigh, NC 27695-7643 8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain. 9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country. YES If no, please answer one of the following: 10. Is the applicant the original owner? NO YES a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)? YES NO If no, give name of country b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company? YES NO If no, give name of country 11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed): Marketing rights, only, have been exclusively licensed to Southern States Cooperative, Richmond, VA. PLEASE NOTE: Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria: 1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species. 2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species. 3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria. The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

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